Customer No.: 31561 Application No.: 10/605,403

Docket No.: 11401-US-PA

REMARKS

Present Status of the Application

The Office Action has allowed claims 1-16. The Office Action rejected claims 17-18, 20

and objected claim 19. Specifically, the Office Action rejected claim 17 under 35 U.S.C. 102(b),

as being anticipated by Kim et al. (U.S. 6,396,106 B2). The Office Action also rejected claims

17-18 and 20 under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (U.S. 6,396,106 B2).

The Office Action objected claim 19 as being dependent upon a rejected base claim. Applicants

have amended claim 17 and canceled 19-20. After entry of the foregoing amendments, claims

17-18 remain pending in the present application, and reconsideration of those claims is

respectfully requested.

Discussion of Office Action Rejections

Applicants respectfully traverse the 102(b) rejection of claim 17 because Kim et al. (U.S.

6,396,106 B2) does not teach every element recited in these claims.

In order to properly anticipate Applicants' claimed invention under 35 U.S.C 102, each

and every element of claim in issue must be found, "either expressly or inherently described, in a

single prior art reference". "The identical invention must be shown in as complete details as is

contained in the claim. Richardson v. Suzuki Motor Co., 868 F. 2d 1226, 1236, 9 USPQ2d

1913, 1920 (Fed. Cir. 1989)." See M.P.E.P. 2131, 8th ed., 2001.

Claim 17 is related a thin film transistor as recited fallowing:

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Claim 17. A thin film transistor (TFT), comprising:

a gate on a substrate;

an insulating layer over the substrate covering the gate;

a channel layer on the insulating layer above the gate; and

a source/drain on the channel layer, the source/drain comprising a composite layer of

MoNb/AlNd or MoNb/AlNd/MoNb.

Kim discloses a thin film transistor as shown in FIG. 2 comprising a gate electrode 33, a

gate insulating layer 37 covering the gate electrode 33, an active layer 39 on the gate insulating

layer 37 corresponding to the gate electrode 33, an ohmic contact layer 41 on the active layer 39

at each side of an area excluding a portion corresponding to the gate electrode 33 and source and

drain electrodes 43, 45 covering the ohmic contact layer 41. The source and drain electrodes 43,

45 are formed from Cr, Mo, MoW or MoNb. Kim does not disclose that source and drain

electrodes of a thin film transistor comprises a composite layer of MoNb/AlNd or

MoNb/AlNd/MoNb. Hence, Kim does not teach every element recited in claim 17.

For at least the foregoing reasons, Applicant respectfully submits that independent claim

17 patently define over the prior art references, and should be allowed. For at least the same

reasons, dependent claim 18 patently define over the prior art as well.

Applicants respectfully traverse the rejection of claim 18 under 103(a) as being

unpatentable over Kim. (U.S. 6,396,106) because a prima facie case of obviousness has not been

established by the Office Action.

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Applicants first submit that, as disclosed above, Kim fails to teach or suggest each and

every element of claim 17 from which claim 18 depend. Claim 18 claims that an amount of

niobium in the MoNb alloy of the composite layer of MoNb/AlNd or MoNb/AlNd/MoNb is less

than 10%. Because Kim fails to teach or suggest that source and drain electrodes of a thin film

transistor comprises a composite layer of MoNb/AlNd or MoNb/AlNd/MoNb, claim 18

describes the composition percentage of the materials in the alloy does also not teach or suggest

by Kim.

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CONCLUSION

For at least the foregoing reasons, it is believed that the pending claims 1-18 are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Respectfully submitted,

Date:

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